

**INDEPENDENT TESTING LAB**

830 ROBINWOOD COURT, TRAVERSE CITY, MI 49686

PH: 231-929-0905

FAX: 231-929-0894

www.gtanalytical.com

Company: LAMBDA ENERGY RESOURCES, LLC

Name:

ClientProj: 2018100175.01

GTA ProjNo: 022820-3

Site Addr: JOUPPI 3-17

Sampled By: MARK STOVER/GCES

Date Rec: 2/28/2020

Time Rec: 2:15 PM

Sample No.	Sample ID	Date Sampled	Time Sampled	Sample Matrix
1	MW-2R	2/28/2020		WATER
2	MW-4	2/28/2020		WATER
3	MW-5S	2/28/2020		WATER
4	MW-5D	2/28/2020		WATER
5	MW-3R	2/28/2020		WATER
6	RW-1	2/28/2020		WATER

ELECTRONIC SIGNATURE REPORT. This is a final report for the following pages of data for the samples specified above. All analysis was performed by the methods stated and all quality control measures required were completed. All quality control information is available upon request.

Kirk Chase

Kirk L. Chase/Chemist
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COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 2018100175.01
LOCATION: JOUPPI 3-17
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-2R

GTA PROJECT NO: 022820-3
GTA SAMPLE NO: 1
DATE SAMPLED: 2/28/2020
TIME SAMPLED:
DATE RECEIVED: 2/28/2020
TIME RECEIVED: 2:15 PM
SAMPLED BY: MARK STOVER/GCES

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		3/2/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

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COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 2018100175.01
LOCATION: JOUPPI 3-17
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-4

GTA PROJECT NO: 022820-3
GTA SAMPLE NO: 2
DATE SAMPLED: 2/28/2020
TIME SAMPLED:
DATE RECEIVED: 2/28/2020
TIME RECEIVED: 2:15 PM
SAMPLED BY: MARK STOVER/GCES

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		3/2/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 2018100175.01
LOCATION: JOUPPI 3-17
MI
SAMPLE MATRIX: WATER
SAMPLE ID: MW-5S

GTA PROJECT NO: 022820-3
GTA SAMPLE NO: 3
DATE SAMPLED: 2/28/2020
TIME SAMPLED:
DATE RECEIVED: 2/28/2020
TIME RECEIVED: 2:15 PM
SAMPLED BY: MARK STOVER/GCES

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		3/2/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

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LOD = LIMIT OF DETECTION

COMPANY:	LAMBDA ENERGY RESOURCES, LLC	GTA PROJECT NO:	022820-3
PROJECT NO:	2018100175.01	GTA SAMPLE NO:	4
LOCATION:	JOUPPI 3-17	DATE SAMPLED:	2/28/2020
		TIME SAMPLED:	
	MI	DATE RECEIVED:	2/28/2020
		TIME RECEIVED:	2:15 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-5D	SAMPLED BY:	MARK STOVER/GCES

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		3/2/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

COMPANY:	LAMBDA ENERGY RESOURCES, LLC	GTA PROJECT NO:	022820-3
PROJECT NO:	2018100175.01	GTA SAMPLE NO:	5
LOCATION:	JOUPPI 3-17	DATE SAMPLED:	2/28/2020
		TIME SAMPLED:	
	MI	DATE RECEIVED:	2/28/2020
		TIME RECEIVED:	2:15 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	MW-3R	SAMPLED BY:	MARK STOVER/GCES

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	ND	1.0	ug/L (PPB)	MR		3/2/2020	EPA 5030B
Toluene	ND	1.0					
Ethylbenzene	ND	1.0					
Xylene(Total)	ND	3.0					
1,2,4-Trimethylbenzene	ND	1.0					
1,3,5-Trimethylbenzene	ND	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

SOIL/SOLIDS CONCENTRATIONS ARE DETERMINED ON A DRY WEIGHT BASIS.

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

COMPANY:	LAMBDA ENERGY RESOURCES, LLC	GTA PROJECT NO:	022820-3
PROJECT NO:	2018100175.01	GTA SAMPLE NO:	6
LOCATION:	JOUPPI 3-17	DATE SAMPLED:	2/28/2020
		TIME SAMPLED:	
	MI	DATE RECEIVED:	2/28/2020
		TIME RECEIVED:	2:15 PM
SAMPLE MATRIX:	WATER		
SAMPLE ID:	RW-1	SAMPLED BY:	MARK STOVER/GCES

EPA 8260B VOLATILE ORGANICS

<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date Extracted</u>	<u>Date Complete</u>	<u>Prep Method</u>
Benzene	12	1.0	ug/L (PPB)	MR		3/2/2020	EPA 5030B
Toluene	110	1.0					
Ethylbenzene	14	1.0					
Xylene(Total)	200	3.0					
1,2,4-Trimethylbenzene	48	1.0					
1,3,5-Trimethylbenzene	17	1.0					
Naphthalene	ND	5.0					
2-Methylnaphthalene	ND	5.0					

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 022820-3

PROJECT NO: 2018100175.01

GTA SAMPLE NO: 1

LOCATION: JOUPPI 3-17

DATE SAMPLED: 2/28/2020

TIME SAMPLED:

DATE RECEIVED: 2/28/2020

TIME RECEIVED: 2:15 PM

MI

SAMPLED BY: MARK STOVER/GCES

SAMPLE ANALYSIS**No: Analysis**

SAMPLE ID: MW-2R

CHLORIDE EPA 300.0

Concentration

16

LOD

10

Units

mg/L (PPM)

Analyst

LV

Date

3/3/2020

Sample

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

s.u. = STANDARD pH UNITS REPORTED AT 25 C

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COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 2018100175.01
LOCATION: JOUPPI 3-17
MI
SAMPLED BY: MARK STOVER/GCES

GTA PROJECT NO: 022820-3
GTA SAMPLE NO: 2
DATE SAMPLED: 2/28/2020
TIME SAMPLED:
DATE RECEIVED: 2/28/2020
TIME RECEIVED: 2:15 PM

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
	SAMPLE ID: MW-4						
	CHLORIDE EPA 300.0	ND	10	mg/L (PPM)	LV	3/3/2020	WATER

ND = NOT DETECTED, RESULT < LOD
LOD = LIMIT OF DETECTION
s.u. = STANDARD pH UNITS REPORTED AT 25 C

COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 2018100175.01
LOCATION: JOUPPI 3-17
MI
SAMPLED BY: MARK STOVER/GCES

GTA PROJECT NO: 022820-3
GTA SAMPLE NO: 3
DATE SAMPLED: 2/28/2020
TIME SAMPLED:
DATE RECEIVED: 2/28/2020
TIME RECEIVED: 2:15 PM

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
SAMPLE ID: MW-5S		ND	10	mg/L (PPM)	LV	3/3/2020	WATER
CHLORIDE EPA 300.0							

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COMPANY: LAMBDA ENERGY RESOURCES, LLC

GTA PROJECT NO: 022820-3

PROJECT NO: 2018100175.01

GTA SAMPLE NO: 4

LOCATION: JOUPPI 3-17

DATE SAMPLED: 2/28/2020

TIME SAMPLED:

DATE RECEIVED: 2/28/2020

TIME RECEIVED: 2:15 PM

MI

SAMPLED BY: MARK STOVER/GCES

SAMPLE ANALYSIS**No: Analysis**

SAMPLE ID: MW-5D

CHLORIDE EPA 300.0

Concentration

31

LOD

10

Units

mg/L (PPM)

Analyst

LV

Date

3/3/2020

Sample

WATER

ND = NOT DETECTED, RESULT < LOD

LOD = LIMIT OF DETECTION

s.u. = STANDARD pH UNITS REPORTED AT 25 C

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PROJECT NO: 2018100175.01
LOCATION: JOUPPI 3-17
MI
SAMPLED BY: MARK STOVER/GCES

GTA PROJECT NO: 022820-3
GTA SAMPLE NO: 5
DATE SAMPLED: 2/28/2020
TIME SAMPLED:
DATE RECEIVED: 2/28/2020
TIME RECEIVED: 2:15 PM

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
SAMPLE ID: MW-3R							
CHLORIDE EPA 300.0		ND	10	mg/L (PPM)	LV	3/3/2020	WATER

ND = NOT DETECTED, RESULT < LOD
LOD = LIMIT OF DETECTION
s.u. = STANDARD pH UNITS REPORTED AT 25 C

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COMPANY: LAMBDA ENERGY RESOURCES, LLC
PROJECT NO: 2018100175.01
LOCATION: JOUPPI 3-17
MI
SAMPLED BY: MARK STOVER/GCES

GTA PROJECT NO: 022820-3
GTA SAMPLE NO: 6
DATE SAMPLED: 2/28/2020
TIME SAMPLED:
DATE RECEIVED: 2/28/2020
TIME RECEIVED: 2:15 PM

SAMPLE ANALYSIS

<u>No:</u>	<u>Analysis</u>	<u>Concentration</u>	<u>LOD</u>	<u>Units</u>	<u>Analyst</u>	<u>Date</u>	<u>Sample</u>
	SAMPLE ID: RW-1						
	CHLORIDE EPA 300.0	21	10	mg/L (PPM)	LV	3/3/2020	WATER

ND = NOT DETECTED, RESULT < LOD
LOD = LIMIT OF DETECTION
s.u. = STANDARD pH UNITS REPORTED AT 25 C

CHAIN OF CUSTODY

PROJECT NUMBER <i>2018100175.01</i>	SITE NAME/ADDRESS <i>JOUPPI 3-17</i>	COMPANY/NAME <i>LAMBDA ENERGY</i>
SAMPLED BY <i>MARK STOVER</i>	COMPANY <i>G.C.E.S.</i>	GTA PROJECT # <i>022820-3</i>

SAMPLE INFORMATION

#	SAMPLE ID	DATE SAMPLED	TIME	MATRIX	ANALYSIS
	<i>MW-2R</i>	<i>2-28-20</i>		<i>GW</i>	<i>BTEX+4, CHLORIDE</i>
	<i>MW-4</i>	↓		↓	↓
	<i>MW-5S</i>				
	<i>MW-5d</i>				
	<i>MW-3R</i>				
	<i>RW-1</i>	↓		↓	↓

BILL TO:

LAMBDA ENERGY

REPORT TO:

JEFF SIMSA

RELEASED BY

DATE/TIME

RECEIVED BY

DATE/TIME

[Signature] *2-28-20*

[Signature] *2/28/20 2:15p*

for 3.4% onica

REQUESTED TAT

☒ STANDARD

☐ 1 BUSINESS DAY

☐ 2 BUSINESS DAYS

☐ 3 BUSINESS DAYS